

CLAIMS

1. A method for using a printer to collate a document from preprinted pages, the method comprising:
loading document sections in at least one printer input media
5 tray;
entering a collation program; and,
creating a collated document from input media tray document sections, in response to the collation program.

10 2. The method of claim 1 wherein loading document sections in at least one input media tray includes loading a plurality of document sections into a corresponding plurality of input media trays.

3. The method of claim 1 wherein entering a collation
15 program includes:
accessing a menu from a collation driver application;
populating fields in the menu; and,
sending collation commands to a printer collation controller
in response to the populated fields.

20 4. The method of claim 3 wherein accessing a menu from a collation driver application includes accessing a menu using a user interface (UI) selected from the group including a front panel of the printer, a client device connected to the printer, and a web page connected
25 to the printer.

5. The method of claim 3 wherein sending collation commands to a collation controller includes sending the collation commands in a format selected from the group of printer description language (PDL) commands including printer job language (PJP), printer control language (PCL), and PostScript (PS) commands.

6. The method of claim 1 further comprising:
disengaging a printer fuser; and,
wherein creating a collated document includes routing
10 document sections from the input media tray, through the disengaged printer fuser.

7. The method of claim 6 wherein loading document sections in at least one input media tray includes loading media selected
15 from the group including paper and plastic sheets.

8. The method of claim 1 further comprising:
creating at least one document section in response to an action selected from the group including printing and copying; and,
20 wherein creating a collated document includes combining document sections from the input media tray with the created document section.

9. The method of claim 1 wherein entering a collation
25 program includes:
accessing a menu from a collation-enabled print driver;

populating fields in the menu; and,
sending print driver commands to a printer controller.

10. The method of claim 1 wherein entering a collation
5 program additionally includes selecting collation options chosen from the
group including the number of collated documents, media side selection,
the tray order, the number of sheets pulled in response to selecting a tray,
stapling, hole punching, and folding; and,
wherein creating a collated document includes created a
10 collated document responsive to the selected options.

11. The method of claim 1 further comprising:
precollating a document section with a plurality of different
pages; and,
15 wherein loading document sections in at least one input
media tray includes loading the precollated document section.

12. The method of claim 11 wherein creating a collated
document from input media tray document sections includes creating the
20 precollated document section.

13. A collation-enabled printer for collating a document
from preprinted pages, the printer comprising:
at least one input media tray having an interface to accept a
25 document section for loading, and an interface to supply the loaded
document section for collation;

a media routing system having an interface to accept media from the input media tray, an input to accept routing commands, and an output to supply the media in an order responsive to the routing commands;

5 a collation controller having an interface to accept collation commands and an interface to supply routing commands that are responsive to the collation commands; and,

at least one output media tray having an interface for receiving the collated document.

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14. The printer of claim 13 further comprising:

a plurality of input media trays, for loading a corresponding plurality of document sections.

15 15. The printer of claim 13 further comprising:

a collation driver application; and,

a user interface (UI) selected from the group including a front panel, a connected client device, and a connected web page, the UI accessing a collation menu from the collation driver application and
20 populating fields in the menu in response to user commands, and in response to the collation menu, supplying collation commands to the collation controller.

25 16. The printer of claim 15 wherein the collation driver application resides in a node selected from the group including the

printer, a connected client device, a connected website, and a connected server.

17. The printer of claim 15 wherein the collation controller
5 receives collation commands in a format selected from the group of printer description language (PDL) commands including printer job language (PJP), printer control language (PCL), and PostScript (PS) commands.

18. The printer of claim 13 further comprising:
10 a print subsystem having an input to receive media delivered from the input media and an input to receive print commands, the print subsystem including a fuser for transferring images to the input media in response to the print commands and supplying the imaged media at an output for delivery to the output media tray; and,
15 wherein the collation controller has an output to supply print commands, to selectively disengage the print subsystem fuser.

19. The printer of claim 18 wherein the input media trays
accept document section media selected from the group including paper
20 and plastic sheets.

20. The printer of claim 13 further comprising:
a print subsystem having an input to receive media delivered
from the input media and an input to receive print commands, the print
25 subsystem transferring images to the input media in response to the print

commands and supplying the imaged media at an output for delivery to the output media tray; and,

wherein the collation controller sends routing commands to the media routing system to collate document sections from the input media trays with imaged media generated by the print subsystem.

21. The printer of claim 15 wherein the collation driver application is a module in a collation-enabled print driver.

22. The printer of claim 15 wherein the collation driver application presents collation menu options chosen from the group including the number of collated documents, media side selection, the tray order, the number of sheets pulled in response to selecting a tray, stapling, hole punching, and folding.

23. The printer of claim 13 wherein the output media tray accepts a collated document as the result of a first collation job and acts as an input tray to supply the collated document as a document section for a second, subsequent, collation job.